



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-15 BYPASS RATIO: 1.0
 UNIQUE ID NUMBER: 1PW009 PRESSURE RATIO (π_{co}): 16.8
 COMBUSTOR: Smoke fix
 ENGINE TYPE: MTF RATED THRUST (F_{oo}) (kN): 68.9

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	43.4	137.4	60.1	25.3
AS % OF ORIGINAL LIMIT	221.2	116.4	81.6	96.6
AS % OF CAEP/2 LIMIT (NO _x)			102.0	
AS % OF CAEP/4 LIMIT (NO _x)			119.9	
AS % OF CAEP/6 LIMIT (NO _x)			129.7	
AS % OF CAEP/8 LIMIT (NO _x)			152.5	

DATA STATUS

x PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.178	0.25	0.70	19.10	
CLIMB OUT	85	2.2	0.945	0.25	1.00	15.00	
APPROACH	30	4.0	0.340	1.65	9.60	5.90	
IDLE	7	26.0	0.148	11.00	35.20	3.00	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			486	2713	9054	3989	-
NUMBER OF ENGINES				7	7	7	7
NUMBER OF TESTS				8	8	8	8
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				39.3	130.6	57.9	23.8
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	269-302
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 01/04/1976-01/03/1977

REMARKS

1. Smoke fix combustor in production prior to 1/1/84

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)